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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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			EXAMINER AKINTOLA, OLABODE	
			ART UNIT 3691	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/841,661

Applicant(s)

DELTA ET AL.

Examiner

Olabode Akintola

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3691

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

In view of the appeal brief filed on 01/03/2006, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following options:

(1) File a reply under 37 CFR 1.111 (if this office action is non-final) or a reply under 37 CFR 1.113 (if this office action is final); or,

(2) Initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fees and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in the 37 CFR 41.20 have been increased since they were previously paid, then the appellant must pay the difference between the increased fees and the amount previously paid.

A handwritten signature in black ink, appearing to read 'Alexander Kalinowski', with a large, stylized flourish at the end.

Alexander Kalinowski

SPE

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Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-19 are not sufficiently precise due to the combining of two different statutory classes of invention in a single claim. The preamble the claim refers to a system, but the body of the claim discusses the specifics of a process (“trade monitoring..., trade comparison .. trade filtering...”). A claim is considered indefinite if it does not apprise those skilled in the art of its scope. *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F. 2d 1200, 1217 (Fed. Cir. 1991).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-19 are rejected under 35 U.S.C. §101 because the claimed invention is directed to a non statutory subject matter.

35 U.S.C. §101 requires that in order to be patentable the invention must be a "new and useful process, machine, manufacture or composition of matter or new and useful improvement

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thereof" (emphasis added). Applicant's claims mentioned above are intended to embrace or overlap two different statutory classes of invention as set forth in 35 U.S.C. §101. The claim begins by discussing a computer system (ex. Preamble of claims 1-19), the body of the claim discusses the specifics of a process ("trade monitoring..., trade comparison .. trade filtering...") (see rejection of claims under 35 U.S.C. §112, second paragraph, for specific details regarding this issue). "A claim of this type is precluded by express language of 35 U.S.C. §101 which is drafted so as to set forth statutory the statutory classes of invention in the alternative only", *Ex parte Lyell* (17USPQ2d 1548).

For examination purpose, the examiner will give these claims their broadest interpretation and treat them as process/method claims.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

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3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-4, 12, 23-24, 30-31 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel et al (US Patent 6944599) in view of Kirwin et al (USPAP 20020029180).

Re Claims 1, 23 and 30: Vogel teaches a computer system executing a trade filtering process for identifying and preventing the processing of suspect trades, the computer system executing processes comprising: a trade monitoring process for monitoring a trade price associated with each trade of a specific item during a trading session (col. 2, lines 27-30); a trade comparison process, responsive to the trade monitoring process, for comparing the trade price of each trade of a specific item to a known acceptable price for that specific item to identify which the trades are suspect trades (col. 6, lines 10-19); a suspect trade filtering process, responsive to the trade comparison process (col. 3, lines 22-26).

Vogel does not explicitly teach a suspect trade filtering process, responsive to the trade comparison process, *for preventing the processing of the suspect trades*, and a specific stock. However, Vogel teaches items. Kirwin teaches a suspect trade filtering process, responsive to the trade comparison process, *for preventing the processing of the suspect trades* (paragraph 0049).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Vogel to adopt the teachings of Kirwin before processing the suspect trade to minimize expenses associated with rectifying the suspect trade.

Re Claims 2 and 24: Vogel teaches an acceptable price determination process for determining the value of the known acceptable price (col. 6, lines 10- 19).

Re Claim 3: Vogel/Kirwin teaches a known price determination process for determining a last known good price for the specific item being traded (Vogel: col. 1, lines 49-57; Kirwin: paragraph 0050).

Re Claim 4 and 31: Vogel/Kirwin teaches a price acceptability window process for determining the known acceptable price, wherein the known acceptable price is an acceptable range of prices which span from a specific amount below the last known good price to a specific amount above the last known good price, wherein the trades which have trade prices that do not fall within the acceptable range of prices are considered suspect trades (Vogel: col. 2, lines 39-47, col. 4, lines 31-40; Kirwin: paragraph 0049).

Re Claims 12 and 34: Vogel/Kirwin teaches a suspect trade resolution process for determining if each the suspect trade is a bad trade (Vogel: col. 4, lines 54-58; Kirwin: paragraph 0049).

2. Claims 5-11,13-18, 20, 22, 25-28, 32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel in view of Kirwin, and further in view of Sposito (US Patent Application 2001/0042033).

Re claims 5 and 32: Vogel/Kirwin do not explicitly teach the steps wherein the acceptable price determination process includes: a last known good price adjustment process for adjusting the last known good price of the specific stock being traded to be equal to the trade price of the last non-suspect trade.

However, Sposito teaches the steps wherein the acceptable price determination process includes: a last known good price adjustment process for adjusting the last known good price of the specific stock being traded to be equal to the trade price of the last non-suspect trade (section [0030]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vogel to include the steps disclosed above as taught by Sposito so that acceptable trade prices can be automatically adjusted and updated without any need for human input thereby creating a new range or boundaries of acceptable trade prices for items as the trade progresses.

Re claims 6 and 7: Vogel/Kirwin do not explicitly teach the step wherein the specific amount above the last known good price and the specific amount below the last known good price are fixed dollar amounts; the specific amount above the last known good price and the specific amount below the last known good price are a percentage of a first trade price.

Sposito teaches the step wherein the specific amount above the last known good price and the specific amount below the last known good price are fixed dollar amounts (section [0018]); the specific amount above the last known good price and the specific amount below the last known good price are a percentage of a first trade price (section [0017]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vogel to include the steps disclosed above as taught by Sposito so that acceptable trade prices can be automatically adjusted and updated using fixed amount or percentages without any need for human input thereby creating a new range or boundaries of acceptable trade prices for items as the trade progresses.

Re claims 9-11: Vogel/Kirwin do not explicitly teach a last known good price initiation process for adjusting the last known good price of the specific stock being traded to be equal to a reference value whenever the stock is being traded for the first time in the trading session; the reference value is the trade price of the specific stock being traded; the reference value is a previous day's closing price.

Sposito teaches a last known good price initiation process for adjusting the last known good price of the specific stock being traded to be equal to a reference value whenever the stock is being traded for the first time in the trading session (section [0023]); the reference value is the trade price of the specific stock being traded (section [0023]); the reference value is a previous day's closing price (section [0031]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vogel to include the steps disclosed above as taught by Sposito so that acceptable trade prices can be automatically adjusted and updated without any need for human input thereby creating a new range or boundaries of acceptable trade prices for items as the trade progresses.

Re claims 13-17, 20, 22, 25-28, 32 and 35: See claims 1-5 analyses discussed above. Furthermore Vogel/Kirwin teach a suspect trade repository process for storing the trade price of the suspect trade (col. 3, lines 22-32); a non-suspect price determination process for determining the trade price of at least a first non-suspect trade of the specific item to occur after the suspect trade (col. 5, lines 38-67; col. 7, lines 1-9; Figs. 4-8); a suspect trade acceptability window

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process for determining a suspect acceptability price range, wherein the suspect acceptability price range spans from a specific amount below the trade price of the suspect trade to a specific amount above the trade price of the suspect trade, wherein the suspect trade is considered a non-suspect trade if the trade price of the at least a first non-suspect trade falls within the suspect acceptability price range (col. 2, lines 39-47; col. 4, lines 31-40); wherein the at least a first non-suspect trade is one trade (col. 5, lines 38-67); wherein the at least a first non-suspect trade is three consecutive trades (col. 5, lines 38-67).

Vogel/Kirwin do not explicitly teach a last known good price adjustment process for adjusting the last known good price of the specific stock being traded to be equal to the trade price of the last non-suspect trade; the specific amount above the trade price of the suspect trade and the specific amount below the trade price of the suspect trade are fixed dollar amounts; wherein the specific amount above the trade price of the suspect trade and the specific amount below the trade price of the suspect trade are a percentage of the trade price of the suspect trade; However, Sposito teaches the a last known good price adjustment process for adjusting the last known good price of the specific stock being traded to be equal to the trade price of the last non-suspect trade (section [0030]); wherein the specific amount above the trade price of the suspect trade and the specific amount below the trade price of the suspect trade are fixed dollar amounts (section [0018]); wherein the specific amount above the trade price of the suspect trade and the specific amount below the trade price of the suspect trade are a percentage of the trade price of the suspect trade (section [0017]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vogel to include the steps disclosed above as taught by Sposito so that acceptable trade prices can be automatically adjusted and updated

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without any need for human input thereby creating a new range or boundaries of acceptable trade prices for items as the trade progresses.

Re claim 20: See claim 17 analysis above. Vogel/Kirwin do not explicitly teach the steps wherein the acceptable price determination process includes: adjusting the last known good price of the specific stock being traded to be equal to the trade price of the last non-suspect trade. However, Sposito teaches the steps adjusting the last known good price of the specific stock being traded to be equal to the trade price of the last non-suspect trade (section [0030]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vogel to include the steps disclosed above as taught by Sposito so that acceptable trade prices can be automatically adjusted and updated without any need for human input thereby creating a new range or boundaries of acceptable trade prices for items as the trade progresses.

Re claim 21: See claim 12 analysis above.

Re claim 22: See claim 13 analysis above.

Re claim 25: See claims 2-3 and 20 analyses above.

Re claim 26: See claim 9 analysis above.

Re claim 27: See claim 12 analysis above.

Re claim 28: See claims 20 and 25 analyses above.

Re claim 34: See claim 12 analysis above.

Re claim 35: See claim 13 analysis above.

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Re claims 8 and 18: See claim 7 and 17 analyses above. Vogel, Kirwin and Sposito do not explicitly teach the step wherein the percentage of the last known good price is 15%; the percentage of the trade price of the suspect trade is 5%. However, Sposito teaches the specific amount of last known good price and specific amount of the trade price of the suspect trade are a percentage.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to set these numbers to 15% and 5% respectively as a matter of design choice.

Re claims 19, 29 and 33: Vogel, Kirwin and Sposito do not explicitly teach a validity filter process for monitoring and examining a trade volume and a trade price wherein the validity filter process discards trades whose the trade volume is negative, whose the trade volume is zero, whose the trade price is negative, and whose the trade price is zero.

Official notice is hereby taken that it is old and well known in the electronic trading systems to remove trades whose trade volume and trade price do not meet certain conditions.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the aforementioned steps to remove trades that are not desirable for the trading activity thereby making the system more efficient.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tone et al (USPN 5596493) teaches discarding trades whose the trade volume is zero (col. 7, lines 47-52).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olabode Akintola whose telephone number is 571-272-3629. The examiner can normally be reached on M-F 8:30AM -5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 571-272-6747. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OA


HANI M. KAZIMI
PRIMARY EXAMINER